

OpenMNND and GeoMOOSE

Presented to:

2007 ND GIS Users Conference



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PROJECT BACKGROUND

A Minnesota – North Dakota Application Development Collaborative

- **Community GIS Technical Committee – Grant Application**
- **FGDC CAP Grant \$75,000 – Approved by USGS**
- **Project Team – Grant Administrator**
 - Steering Committee**
 - Project Coordinator**
 - Client Software Developers**
- **Project Supporters**

PRESENTATION TOPICS

A Minnesota – North Dakota Application Development Collaborative

- **OpenMNND**

Grant Project Name

- **GeoMOOSE**

Open Source Software

PROJECT FOCUS

To provide local units of government with a cost-effective, consistent, open source web mapping solution to distribute information people want.

- **Deliver enhanced public access to GIS Data**
- **Web mapping software application technology**
- **Provide a consistent look and feel across multiple agencies**
- **Develop client-side interactive mapping tools**
- **Promote the use of WMS and WFS data services**
- **Promote collaborative efforts to reduces costs**

PROJECT WEB SITE

- Home
- News
- Documentation
- Downloads
- Community



The screenshot shows the OpenMNND Project website. At the top, there is a header with a map of Minnesota and North Dakota, the project title "The OpenMNND Project", and a sub-header "A Minnesota - North Dakota Application Development Collaborative". To the right, it says "Project Funded Through An NSDI Grant Provided By:" followed by the FGDC logo. Below the header is a navigation bar with links: Home, News, Documentation, Downloads, and Community. The main content area has a "Navigation" section with a list of links: Home, News, Documentation, Downloads, and Community. To the right of this is a "Welcome to the OpenMNND Project" section. It contains a paragraph about the project's goal to provide a cost-effective, consistent, open source web map solution. Below this is a section titled "This site gives you links to:" which lists several links: project history and grant summary, organization and time line, information about MOOSE, a demo of the OpenMNND project, a link to download MOOSE code, an OpenMNND Brochure, and a link to check the current software development status. To the right of this list is a small image of a web map application. Below the links is a paragraph about the rapid prototype approach and the need for user input. This is followed by a list of actions: come see a presentation, download the GeoMOOSE code, try one of the demos, and sign up for the mailing list. The final section is "We're Open!" which encourages registration and provides information about ongoing activities and new MOOSE releases.

The OpenMNND Project
A Minnesota - North Dakota Application Development Collaborative

Project Funded Through An NSDI Grant Provided By: fgdc
Federal Geographic Data Committee

[Home](#) [News](#) [Documentation](#) [Downloads](#) [Community](#)

Navigation

- ▶ [Home](#)
- ▶ [News](#)
- ▶ [Documentation](#)
- ▶ [Downloads](#)
- ▶ [Community](#)

Welcome to the OpenMNND Project

With the OpenMNND project we're providing local units of government a cost-effective, consistent, open source web map solution to distribute the information people want.

This site gives you links to:

- our [project history and grant summary](#)
- our [organization and time line](#)
- [information about MOOSE](#), our prototype software using MapServer
- a [demo of the OpenMNND project](#) in its current status
- a link to [download MOOSE](#) code to try
- [OpenMNND Brochure](#)
- click on the news links to check the current software development status



We are using a rapid prototype approach to development, which means we need YOU to help us improve this software and provide the functionality and design that will best serve local governments and the public.

- come see a presentation and speak to a project committee member
- download the GeoMOOSE code and try it out
- try one of our demos
- sign up for our mailing list and send us your comments

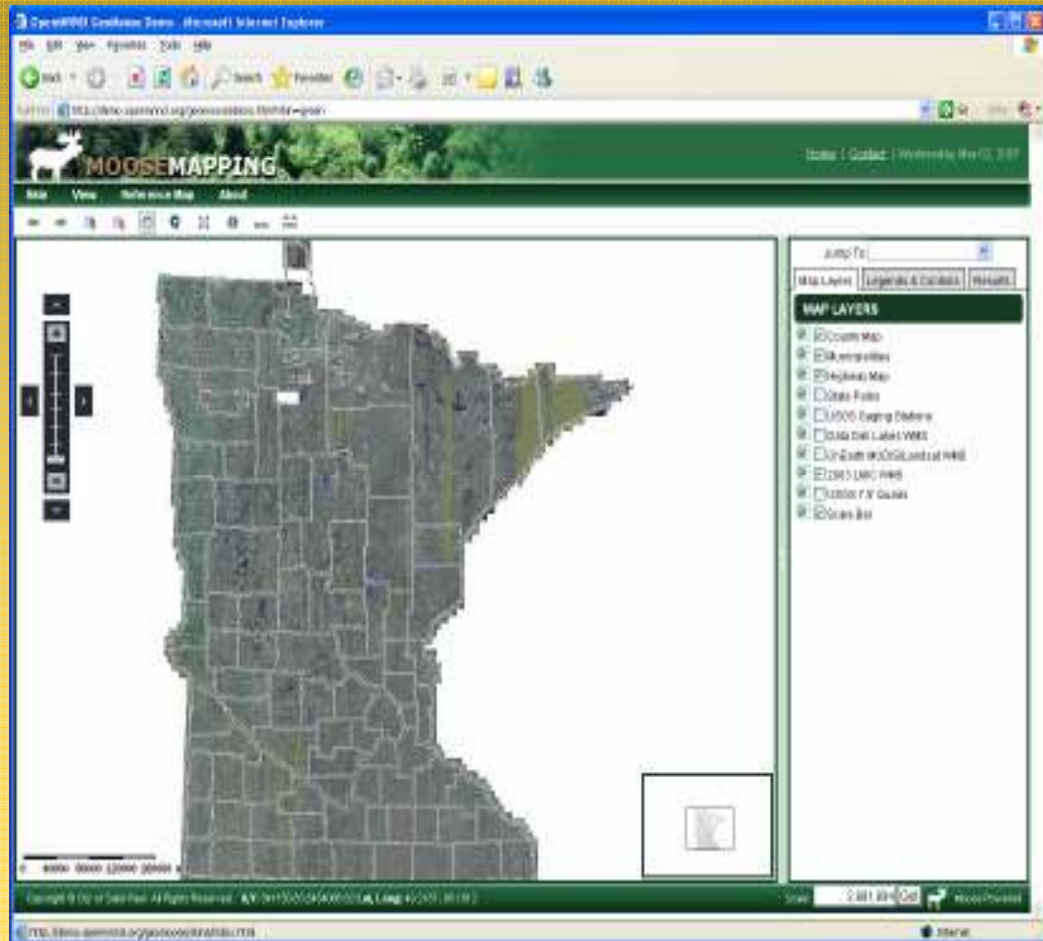
We're Open!

Please take a moment to register with the OpenMNND Project. When you register you will be kept abreast of ongoing activities related to the project, including information on new MOOSE releases, added functionality, and related services specifically being developed for MOOSE. We appreciate your support and welcome your input.

<http://www.openmnnd.org>

PROJECT OUTCOMES

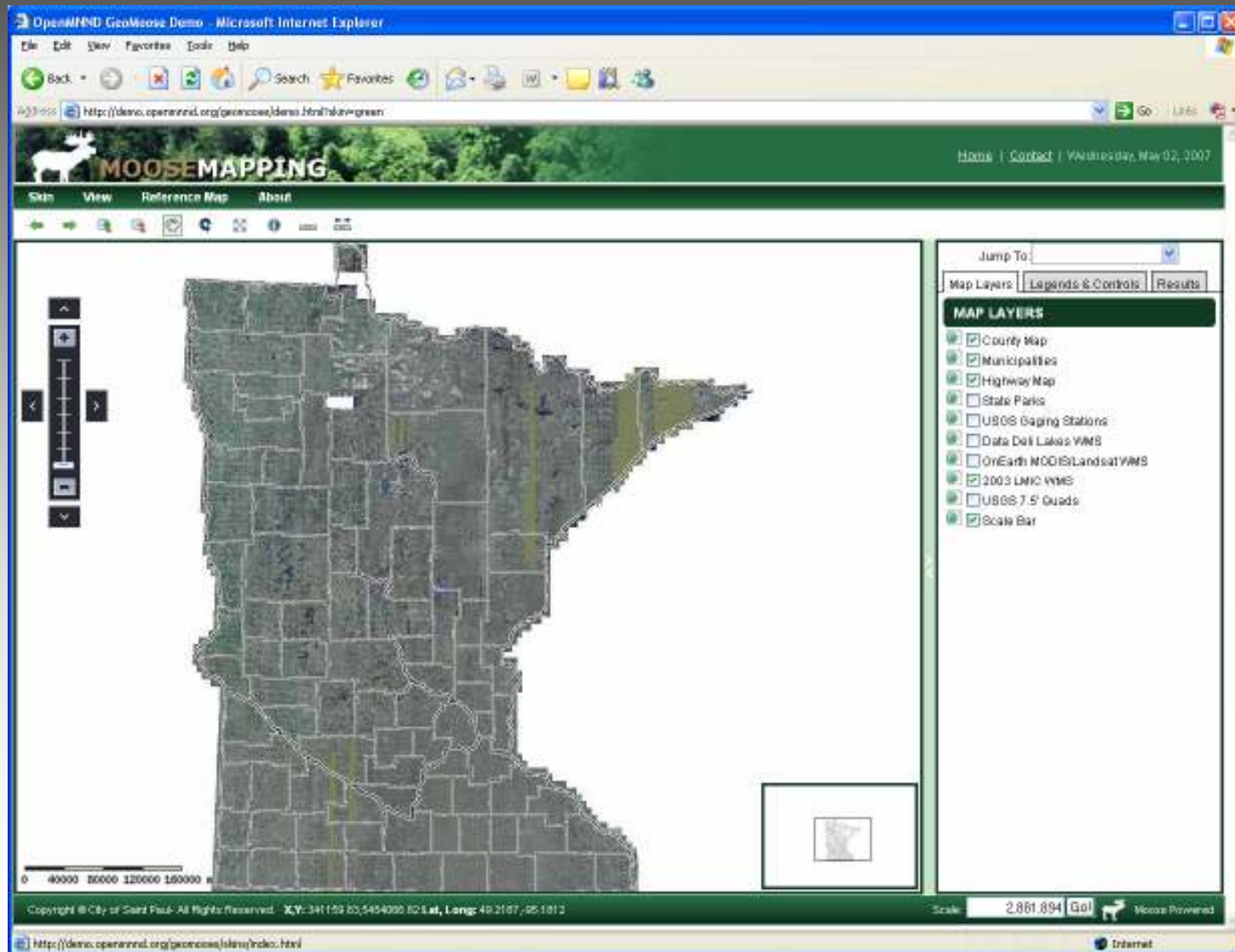
- **Dakota County**
- **McLeod County**
- **City of Apple Valley**
- **Metropolitan Mosquito Control District**
- **Buffalo-Red River Watershed District**
- **Morton County**



SOFTWARE DEVELOPMENT

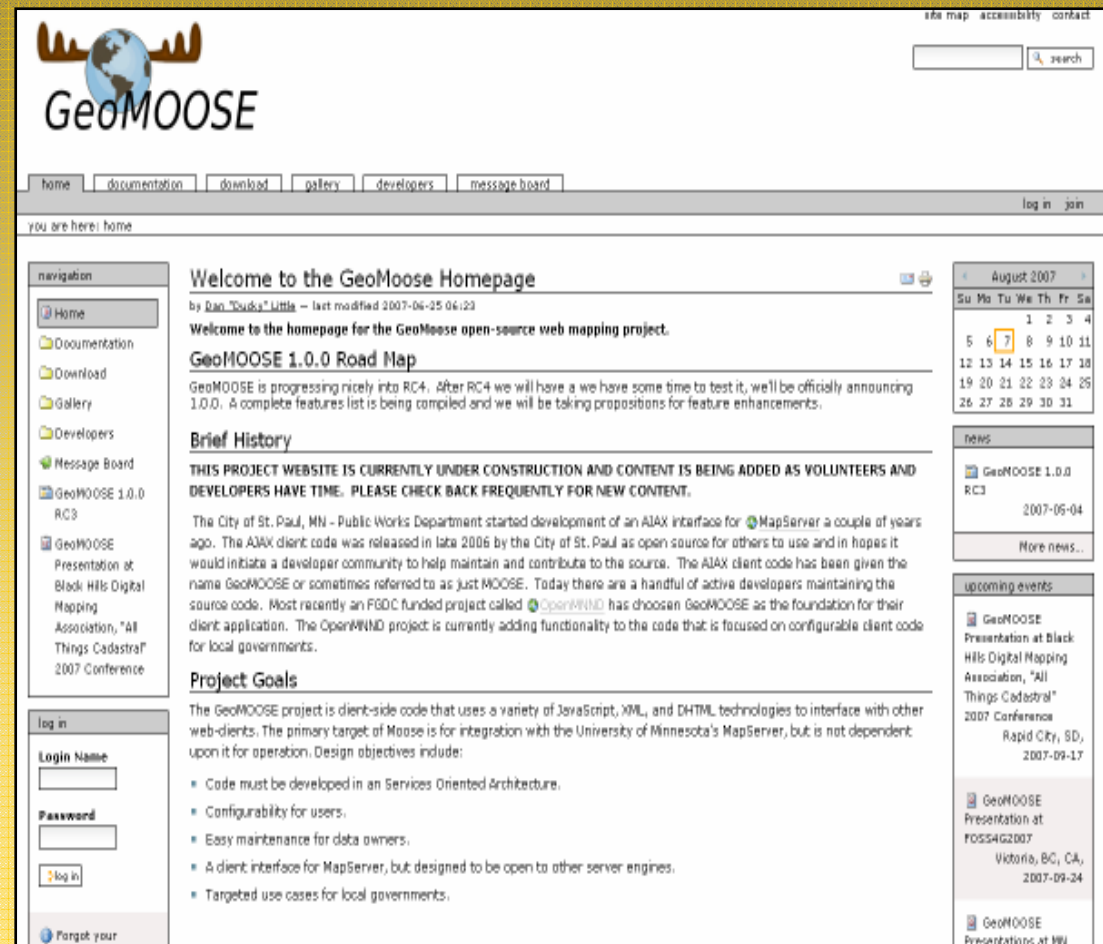
- **Application Selection – GeoMoose (City of St. Paul)**
- **Template Development – graphic design work**
- **Client-side code – HTML, CSS, XML, JavaScript, AJAX**
- **Downloadable package developed – MS4W**
- **Services developed - Identify, Selection, and Printing**

GEOMOOSE



GEOMOOSE WEB SITE

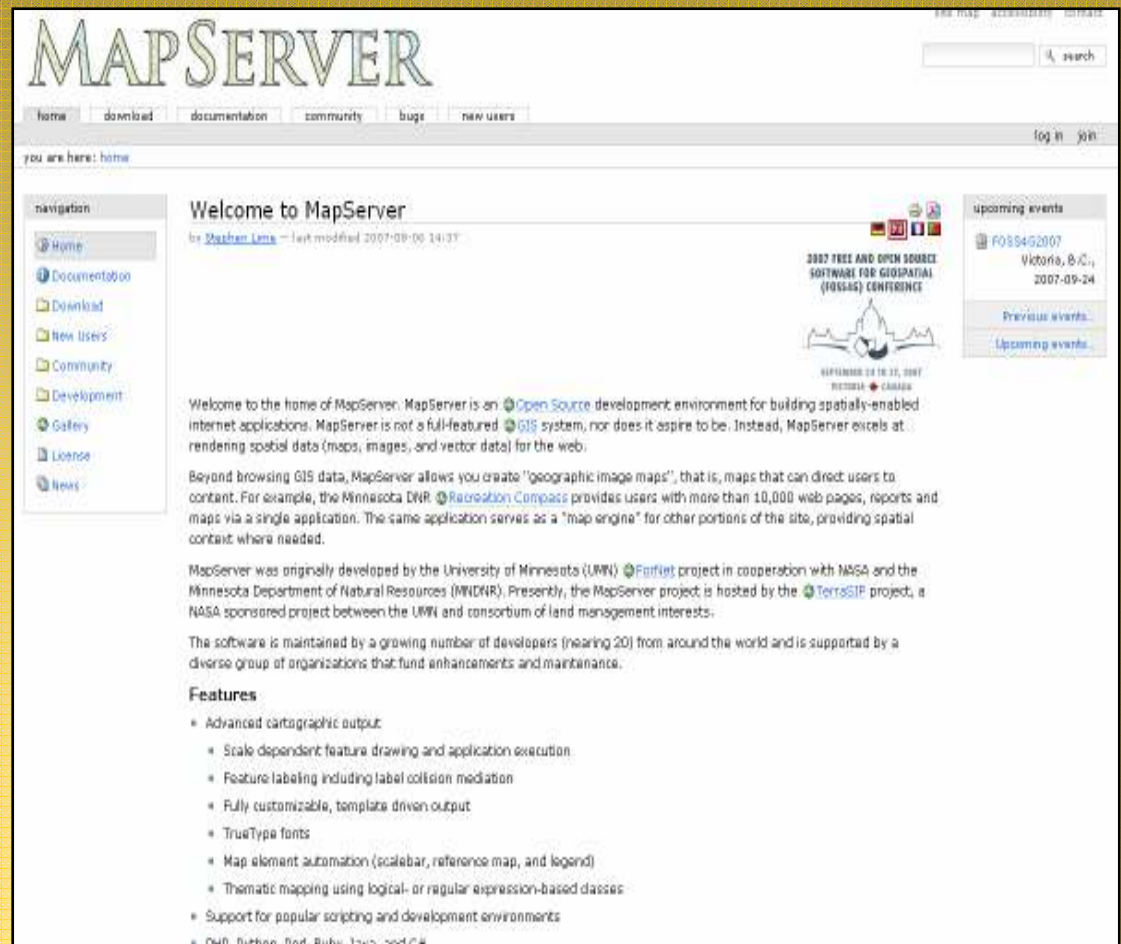
- Documentation
- Downloads
- Gallery
- Developers
- News
- *State Application*
- *County Application*



<http://www.geomoose.org>

OPEN SOURCE SOFTWARE WEB SITE

- Documentation
- Downloads
- Gallery
- Developers
- News
- *World-wide*



<http://www.openmnnd.org>

PROJECT GOALS

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ACCESSING EXTERNAL DATA SOURCES SIMPLE APPROACH

- Land Records

Property Details

The screenshot displays the McLeod County Web GIS Viewer in a Microsoft Internet Explorer browser window. The address bar shows the URL: <http://65.77.74.200/mcleodcounty/TaxBill.asp?RollType=R&ParcelNumber=010340300&TaxYear=2007>. The page title is "Linda Radtke - McLeod County Tax Collector".

The main content area is divided into two columns. The left column, titled "McLeod County Website", features a photograph of a classical building and a "Property No" field containing the value "R 01-034-0300 (2007)". The right column, titled "Linda Radtke - McLeod County Tax Collector", provides detailed information about the property and taxes.

Owner Information:
Primary Taxpayer/Owner
CHARLES & SANDRA JULIAN F&M TR
21549 200TH ST
HUTCHINSON MN 55360

Escrow Information:
Escrow Agent: DIRECT PAY PLAN

Legal Description:
E 1/2 NW 1/4 EX RR (TH #22 - 2.24 AC)
Section: 34 Township: 117 Range: 030

Property Classification: FULL HOMESTEAD AGRICULTURAL

Assessment Year:

Assessment Year	Est. Market Value - Building	Est. Market Value - Land	Est. Market Value - Total
2007	\$105,000.00	\$335,100.00	\$440,100.00

Payable Year:

Payable Year	Total Tax	Total Tax/Armts	Paid To Date
2007	\$2,136.00	\$2,136.00	\$1,068.00

Due Dates:

Due Date	Due Amount
5/15/2007	PAID
11/15/2007	\$1,068.00

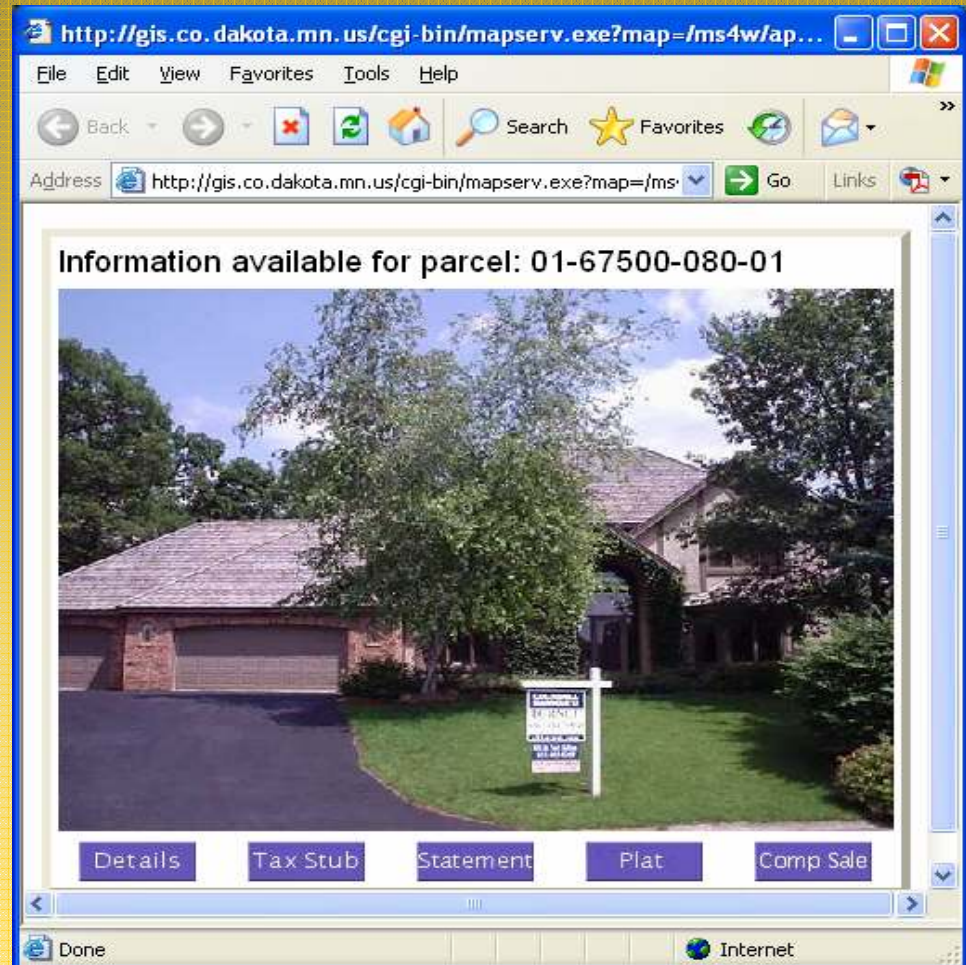
Additional Information:
Real Estate and Personal Property Taxes are determined using the previous year assessment value. Mobile Home Taxes are determined using the current year assessment value.

VisualGov.com Copyright

Search Taxes

ACCESSING EXTERNAL DATA SOURCES ADVANCED APPROACH

- **Neighborhood Information**
- **Oblique Imagery**
- **Land Records**
 - **Property Details**
 - **Tax Stub**
 - **Tax Statement**
 - **Subdivision Plat**
 - **Comparable Sales**



LOCAL GOVERNMENT EXAMPLES

http://gis.co.dakota.mn.us - Dakota County Compara

Back - Forward - Stop - Home - Search - Favorites

Dakota County Compa

IMPORTANT ~ PLEASE NOTE:

- Comparable sales apply only to single family, twin h
- This application attempts to find properties recently subject property.
- NO GUARANTEE is being made that properties ide
- A trained real estate appraiser would make adjustm before making an estimate of market value.

Note: PIN numbers are links to Dakota County Real Estate Inqui
Use the BACK BUTTON on your browser to return to Dakota Cou

[Show Vicini](#)

SUBJECT PROPERTY: TWO STORY / S.FAM.RES

PIN	PROPERTY ADDRESS	SALE DATE	SALE AMOU
01-67500-080-01	12645 FLORIDA LN, APPLE VALLEY	N/A	N/A

Search Radius in Miles:

6 COMPARABLES FOUND WITHIN 1 MILE

Label	PIN	PROPERTY ADDRESS	SALE DATE	SALE AMOU
	sort	sort	sort	sort
1	01-52004-080-03	6690 129TH ST W, APPLE VALLEY	7/2007	\$380,000
2	01-52004-110-04	12812 FLORAL AVE, APPLE VALLEY	4/2007	\$375,000
3	01-52004-230-02	12881 FLORAL AVE, APPLE VALLEY	4/2007	\$390,000

http://gis.co.dakota.mn.us - Dakota County Comparable Sales Search - Microsoft Internet Expl...

Back - Forward - Stop - Home - Search - Favorites

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SUBJECT PROPERTY: TWO STORY / S.FAM.RES

PIN	PROPERTY ADDRESS	SALE DATE	SALE AMOUNT	YEAR BUILT	BED-ROOMS	BATHS	FINISHED SQ FT	LOT SIZE
01-67500-080-01	12645 FLORIDA LN, APPLE VALLEY	N/A	N/A	1987	4	3.5	3263	2.66 acres

Search Radius in Miles:

6 COMPARABLES FOUND WITHIN 1 MILE

Label	PIN	PROPERTY ADDRESS	SALE DATE	SALE AMOUNT	YEAR BUILT	BED-ROOMS	BATHS	FINISHED SQ FT	LOT SIZE	DIST. FROM
	sort	sort	sort	sort	sort	sort	sort	sort	sort	sort
1	01-52004-080-03	6690 129TH ST W, APPLE VALLEY	7/2007	\$380,000	1986	4	2.5	2668	0.49 acres	0.4 miles
2	01-52004-110-04	12812 FLORAL AVE, APPLE VALLEY	4/2007	\$375,000	1985	4	3.25	3345	0.8 acres	0.4 miles

PROJECT GOALS

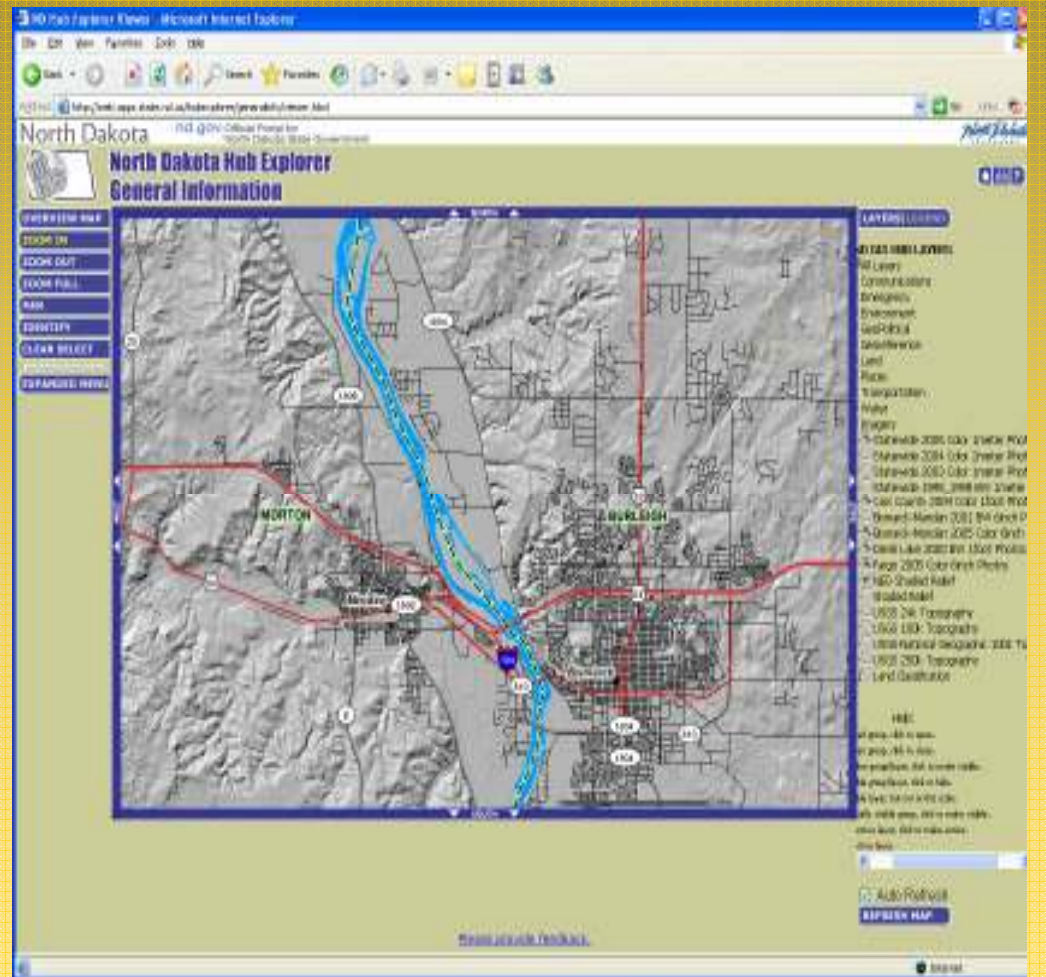
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ACCESSING EXTERNAL IMAGE SERVERS

FGDC Requirement: WMS and WFS Data Services

- **North Dakota
GIS Hub Explorer**
- **Minnesota
Land Management
Information Center
*Geospatial
Image Server***
- **Addressing
*Lookup Service***



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COLLABORATIVE EFFORTS TO REDUCE COSTS

- Metropolitan Mosquito Control
Address Locator
Site Spraying

The screenshot shows a web browser window titled "Mosquito Larval Site Information and Inspection Record - Microsoft Internet Explorer". The address bar shows the URL: <http://www.mmc.org/mosquito/mosquito.php?siteid=274716-036>. The page content includes the title "Metropolitan Mosquito Control District" and "Mosquito Larval Information and Inspection Record". Below this, there is a section for "MMCD Larval Site Information" with a link to "What do these data mean?". The site information is displayed in a table with columns: "MMCD Site ID#", "Type", "Floodwater Mosq. Rank", "Cattail Mosq.", "WNV (Culex) Mosq.", and "Treat by". The data for site 274716-036 is as follows:

MMCD Site ID#	Type	Floodwater Mosq. Rank	Cattail Mosq.	WNV (Culex) Mosq.	Treat by
274716-036	4.1	High		Yes	Aerial

Below the site information, there is a section for "Inspection and Treatment Records for this Site" with a table containing columns: "Date", "Site Wetness", "Action", "Pop. Count", and "Material". The data is as follows:

Date	Site Wetness	Action	Pop. Count	Material
7/9/2007	30-39%	Inspect for Aerial Treatment	10	
7/5/2007	20-29%	Inspect for Aerial Treatment	0	
5/25/2007	40-49%	Inspect for Aerial Treatment	0	
5/8/2007		Aerial Treatment	0	Bti granules
5/2/2007	20-29%	Inspect for Aerial Treatment	1	
4/24/2007	0-19%	Inspect for Aerial Treatment	0	
9/6/2006	0-19%	Inspect for Aerial Treatment	0	
8/26/2006		Aerial Treatment	0	Bti granules
8/25/2006	20-29%	Inspect for Aerial Treatment	4	
8/2/2006	30-39%	Inspect for Aerial Treatment	0	
7/6/2006	20-29%	Inspected for ground treatment	0	
6/20/2006		Aerial Treatment	0	Bti granules
6/19/2006	40-49%	Inspect for Aerial Treatment	8	
5/10/2006	40-49%	Inspect for Aerial Treatment	0	
5/3/2006	70-79%	Inspect for Aerial Treatment	30	
4/19/2006	90-100%	Inspect for Aerial Treatment	1	

MORTON COUNTY'S STRATEGY

Utilize existing GIS Data and generate interest!

- **Selected GeoMOOSE framework**
- **Integrated existing GIS data maintained by Highway Dept.**
- **Chose functionality and tools for web-mapping application**
- **Promoted the use of GIS Web Site**
- **Minimize costs**

Chuck Morman
Will demonstrate the Morton County site
and discuss project.